Notice of Allowability	Application No.	Applicant(s)
	09/893,740	DOHERTY ET AL.
	Examiner	Art Unit
	Mohammad A. Siddiqi	2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *11/16/2005*.

2. ☒ The allowed claim(s) is/are *78-80, 82-84, 89-90, 92-94*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *02/15/2006* .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the

changes and/or additions be unacceptable to applicant, an amendment may

be filed as provided by 37 CFR 1.312. To ensure consideration of such an

amendment, it MUST be submitted no later than the payment of the issue

fee.

Authorization for this examiner's amendment was given in a telephone

interview with Mark R. Kendrick on 02/15/2006.

2.   Please amend the claims as attached.

3.   Any inquiry concerning this communication or earlier communications

from the examiner should be directed to Mohammad A. Siddiqi whose

telephone number is (571) 272-3976. The examiner can normally be

reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, John A. Follansbee can be reached on (571) 272-

3964. The fax phone number for the organization where this application or

proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained

from the Patent Application Information Retrieval (PAIR) system. Status

information for published applications may be obtained from either Private

PAIR or Public PAIR. Status information for unpublished applications is

available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on

access to the Private PAIR system, contact the Electronic Business Center

(EBC) at 866-217-9197 (toll-free).

MAS

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

IN THE CLAIMS:

Please amend the claims as follows:

Claims 1 - 77 (canceled).

78.   (currently amended) A system, comprising:

a client device, the client transmitting a request for an operating

system utilizing the BOOTP protocol and setting an indicator identifying that

this boot sequence is being made to a management server, a first virtual

local area network (VLAN) including the client device;

a pre-boot execution environment (PXE) agent device, the PXE agent

device located on a first local area network with the client device, to receive

the BOOTP request for the operating system, to open a hypertext transport

protocol (HTTP) session, to convert the BOOTP request for the operating

system to a HTTP request for the operating system; and to transmit the

HTTP request for the operating system; and

a pre-boot execution environment (PXE) server, the PXE server being

located on a second local area network separated by at least one router from

the first local area network and a second VLAN, distinct from the first VLAN,

including the PXE server, to receive the converted HTTP request for the

operating system, to retrieve the operating system requested in the

converted HTTP request, and to transmit the retrieved operating system via

HTTP, wherein the PXE agent device receives the retrieved operating system

via HTTP, converts the HTTP protocol to the BOOTP protocol, and transmits

the retrieved operating system to the client device utilizing the BOOTP

protocol, wherein the client sets an indicator identifying that this boot

sequence is being made to a PXE server.

79.   (previously presented) The system of claim 78, wherein the PXE client

and the PXE agent device communicate in a virtual local area network

(VLAN).

80.   (previously presented) The system of claim 78, wherein at least a

switch physically separates the PXE client and the PXE server.

81.   (cancelled).

82.   (currently amended) A method for operating a management server,

comprising:

receiving a pre-boot request from a PXE client, the PXE client

requesting booting information utilizing the hypertext transport protocol

(HTTP);

querying a management database for booting information for the PXE

client;

receiving the booting information from the management database if

the management database has the booting information for the PXE client,

the booting information including instructions to install a specific operating

system if the management database has booting information for the PXE

client;

transmitting, utilizing HTTP, both the instructions to install a specific

operating system and the operating system to the PXE client if the

management database has booting information for the PXE client; and

transmitting, utilizing HTTP, a command for the PXE client to boot

locally if the management database does not have booting information for

the PXE client and default information in the management server for the PXE

client indicates the PXE client should boot locally, wherein a first virtual local

area network (VLAN) includes the PXE client and a second VLAN includes the

management server, the first VLAN being distinct from the second VLAN.

83.   (previously presented) The method of claim 82, further including

transmitting a command to the PXE client to boot to an operating system on

a network if the management information does not have booting information

for the PXE client and the management server does not have default

information for the PXE client

84.   (previously presented) The method of claim 82, wherein one of a

switch or a router physically separates the client and the management

server.

85.   (cancelled).

86. (cancelled)

87.   (cancelled)

88.   (cancelled).

89.   (currently amended) A method of utilizing a pre-boot execution

environment (PXE) agent device, comprising:

receiving a request for an operating system, the client transmitting the request utilizing the BOOTP protocol;

opening a hypertext transport protocol (HTTP) session;

converting the request for the operating system from the BOOTP protocol to a HTTP request which utilizes an HTTP protocol;

transmitting the HTTP request for the operating system utilizing the HTTP protocol to a PXE server, the PXE server being located on a second local area network separated by at least one router from the first local area network;

receiving a retrieved operating system from PXE server utilizing the HTTP protocol;

converting the HTTP protocol to the BOOTP protocol; and

transmitting the retrieved operating system to the PXE client device utilizing the BOOTP protocol, wherein a first virtual local area network (VLAN) includes the PXE client and a second VLAN includes the PXE server, the first VLAN being distinct from the second VLAN.

90.   (previously presented) The method of claim 89 wherein the PXE client and the PXE agent device communicate in a virtual local area network.

91.   (cancelled).

92.   (currently amended) A program code storage device, comprising:

a computer-readable storage medium; and

computer-readable data, stored on the computer-readable storage

medium, the computer-readable data including instructions, which when

executed, cause a processor to:

receive a pre-boot request from a PXE client, the PXE client requesting

booting information utilizing the hypertext transport protocol (HTTP);

query a management database for booting information for the PXE

client;

receive the booting information from the management database if the

management database has booting information for the PXE client, the

booting information including instructions to install a specific operating

system if the management database has booting information for the PXE

client;

transmit, utilizing HTTP, both the instructions to install a specific

operating system and the operating system to the PXE client if the

management database has booting information for the PXE client; and

transmit, utilizing HTTP, a command for the PXE client to boot locally if

the management database does not have booting information for the PXE

client and default information in the management server for the PXE client

indicates the PXE client should boot locally, wherein a first virtual local area

network (VLAN) includes the PXE client and a second VLAN includes the

management server, the first VLAN being distinct from the second VLAN.

93.   (previously presented) The program code storage device of claim 92,

including instructions which when executed cause the processor to transmit

a command to the PXE client to boot to an operating system on a network if

the management information does not have booting information for the PXE

client and the management server does not have default information for the

PXE client

94.   (previously presented) The program code storage device of claim 92,

wherein one of a switch or a router physically separates the client and the

management server.

95.   (cancelled).